

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of performing a medical procedure, comprising: stimulating a nerve to adjust beating of a heart to a first condition; delivering a first vasoactive substance to a site of the medical procedure while the beating of the heart is in the first condition; performing the medical procedure; and delivering a second vasoactive substance to the site while the beating of the heart is in the first condition.
2. (Original) The method of claim 1 further comprising: stimulating the heart to adjust beating of the heart to a second condition.
3. (Original) The method of claim 2, wherein the second condition is a condition in which the heart is beating, further comprising: delivering the second vasoactive substance to the site after the second condition is achieved.
4. (Original) The method of claim 1 wherein the first vasoactive substance is a vasodilator selected from the group consisting of: an organic nitrate, isosorbide mononitrate, a mononitrate, isosorbide dinitrate, a dinitrate, nitroglycerin, a trinitrate, minoxidil, sodium nitroprusside, hydralazine hydrochloride, nitric oxide, nicardipine hydrochloride, fenoldopam mesylate, diazoxide, enalaprilat, epoprostenol sodium, a prostaglandin, milrinone lactate, a bipyridine, a dopamine D1-like receptor agonist, a dopamine D1-like receptor stimulant, and a dopamine D1-like receptor activator.
5. (Original) The method of claim 1 wherein the second vasoactive substance is a vasoconstrictor selected from the group consisting of: a sympathomimetic, methoxamine hydrochloride, epinephrine, midodrine hydrochloride, desglymidodrine, an alpha-receptor agonist, an alpha-receptor stimulant, and an alpha-receptor activator.
6. (Original) The method of claim 1 further comprising: delivering a systemic drug during the medical procedure.

7. (Original) The method of claim 6 wherein the systemic drug is selected from the group consisting of: a beta-blocker, a cholinergic agent, a cholinesterase inhibitor, a calcium channel blocker, a sodium channel blocker, a potassium channel agent, adenosine, an adenosine receptor agonist, an adenosine deaminase inhibitor, dipyridamole, a monoamine oxidase inhibitor, digoxin, digitalis, lignocaine, a bradykinin agent, a serotonergic agonist, an antiarrhythmic agent, a cardiac glycoside, a local anesthetic, atropine, a calcium solution, an agent that promotes heart rate, an agent that promotes heart contractions, dopamine, a catecholamine, an inotrope glucagon, a hormone, forskolin, epinephrine, norepinephrine, thyroid hormone, a phosphodiesterase inhibitor, prostacyclin, prostaglandin and a methylxanthine.

8. (Original) The method of claim 1 wherein the medical procedure is selected from the group consisting of: a fluoroscopic procedure, a cardiac procedure, a vascular procedure, a neurosurgical procedure, an electrophysiology procedure, an ablation procedure, an endovascular procedure, a pulmonary procedure, an aneurysm repair, an imaging procedure, a CAT scan procedure, a MRI procedure, a genetic therapy, a cellular therapy, a cancer therapy, a radiation therapy, a transplantation procedure, a coronary angioplasty procedure, a stent delivery procedure, an atherectomy procedure, a procedure that requires precise control of cardiac motion, a procedure that requires precise control of bleeding, a port-access procedure, an endoscopic procedure, a sternotomy procedure, a thoracotomy procedure and a robotic procedure.

9. (Original) The method of claim 1 further comprising: re-stimulating the nerve to re-adjust beating of the heart to the first condition; and continuing the medical procedure.

10. (Original) The method of claim 1 wherein the nerve is selected from the group consisting of: a vagal nerve, a carotid sinus nerve, a fat pad.

11. (Cancelled) A method of performing a medical procedure on a vessel, comprising: stimulating a nerve to adjust beating of a heart to a still condition; delivering a first vasoactive substance to the vessel; performing the medical procedure on the vessel while the heart is in a still condition and after delivery of the first vasoactive substance to the vessel; and; delivering a second vasoactive substance to the vessel and reducing stimulation of the nerve to adjust beating of the heart to a beating condition after performing the medical procedure.

12. (Cancelled) The method of claim 11 further comprising: stimulating the heart to achieve the beating condition.

13. (Cancelled) The method of claim 11 further comprising: re-stimulating the nerve to re-adjust beating of the heart to the still condition; and continuing the medical procedure on the vessel.

14. (Cancelled) The method of claim 11 wherein the nerve is selected from the group consisting of: a vagal nerve, a carotid sinus nerve, a fat pad.

15. (Cancelled) The method of claim 11 wherein the first vasoactive substance is a vasodilator selected from the group consisting of: an organic nitrate, isosorbide mononitrate, a mononitrate, isosorbide dinitrate, a dinitrate, nitroglycerin, a trinitrate, minoxidil, sodium nitroprusside, hydralazine hydrochloride, nitric oxide, nicardipine hydrochloride, fenoldopam mesylate, diazoxide, enalaprilat, epoprostenol sodium, a prostaglandin, milrinone lactate, a bipyridine, a dopamine D1-like receptor agonist, a dopamine D1-like receptor stimulant, and a dopamine D1-like receptor activator.

16. (Cancelled) The method of claim 11 wherein the second vasoactive substance is a vasoconstrictor selected from the group consisting of: a sympathomimetic, methoxamine hydrochloride, epinephrine, midodrine hydrochloride, desglymidodrine, an alpha-receptor agonist, an alpha-receptor stimulant, and an alpha-receptor activator.

17. (Cancelled) A method of harvesting a vessel, comprising: stimulating a nerve to adjust beating of a heart to a first condition; delivering a vasodilative substance to the heart while the heart is in the first condition; harvesting the vessel while the heart is in the first condition, and; delivering a vasoconstrictive substance to the heart and reducing stimulation of the nerve to adjust beating of the heart to a second condition after harvesting the vessel.

18. (Cancelled) The method of claim 17, further comprising: stimulating the heart to adjust beating of the heart to the second condition.

19. (Cancelled) The method of claim 17 wherein the vasodilator is selected from the group consisting of: an organic nitrate, isosorbide mononitrate, a mononitrate, isosorbide dinitrate, a dinitrate, nitroglycerin, a trinitrate, minoxidil, sodium nitroprusside, hydralazine hydrochloride, nitric oxide, nicardipine hydrochloride, fenoldopam mesylate, diazoxide, enalaprilat, epoprostenol sodium, a prostaglandin, milrinone lactate, a bipyridine, a dopamine D1-like receptor agonist, a dopamine D1-like receptor stimulant, and a dopamine D1-like receptor activator.

20. (Cancelled) The method of claim 17 wherein the vasoconstrictor is selected from the group consisting of: a sympathomimetic, methoxamine hydrochloride, epinephrine, midodrine hydrochloride, desglymidodrine, an alpha-receptor agonist, an alpha-receptor stimulant, and an alpha-receptor activator.